FIG. 1

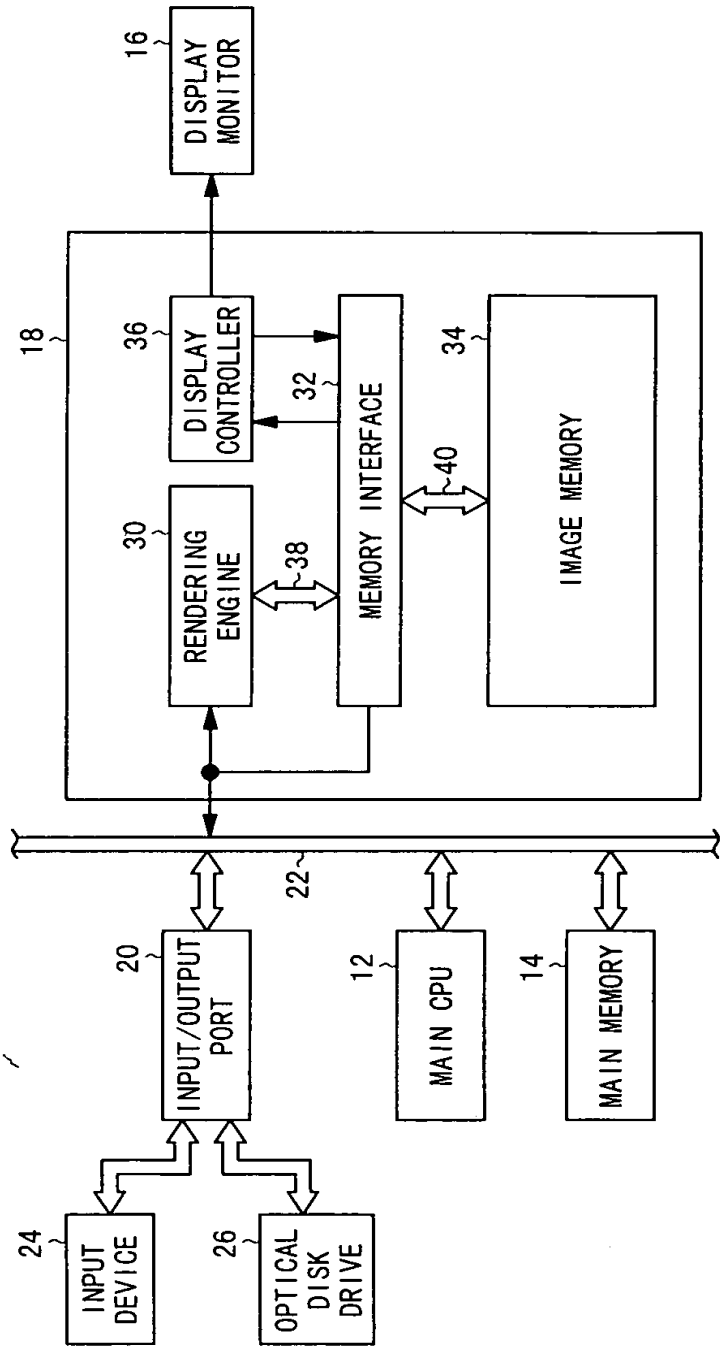

10
16
DISPLAY MONITOR
18
36
DISPLAY CONTROLLER
32
34
IMAGE MEMORY
30
RENDERING ENGINE
38
MEMORY INTERFACE
40
22
20
INPUT/OUTPUT PORT
12
MAIN CPU
14
MAIN MEMORY
24
INPUT DEVICE
26
OPTICAL DISK DRIVE

FIG. 2

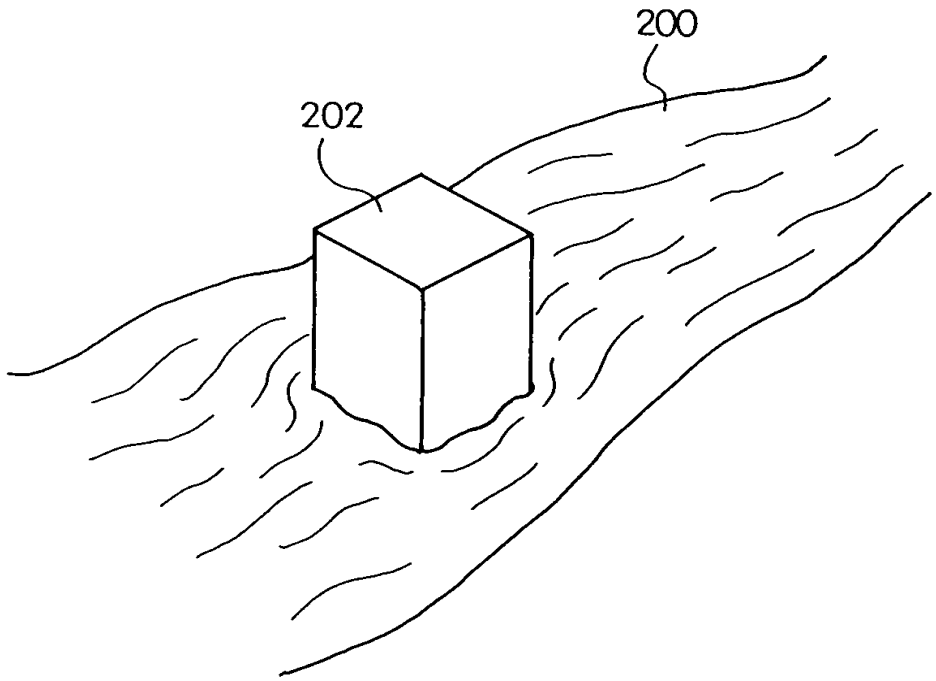


FIG. 3

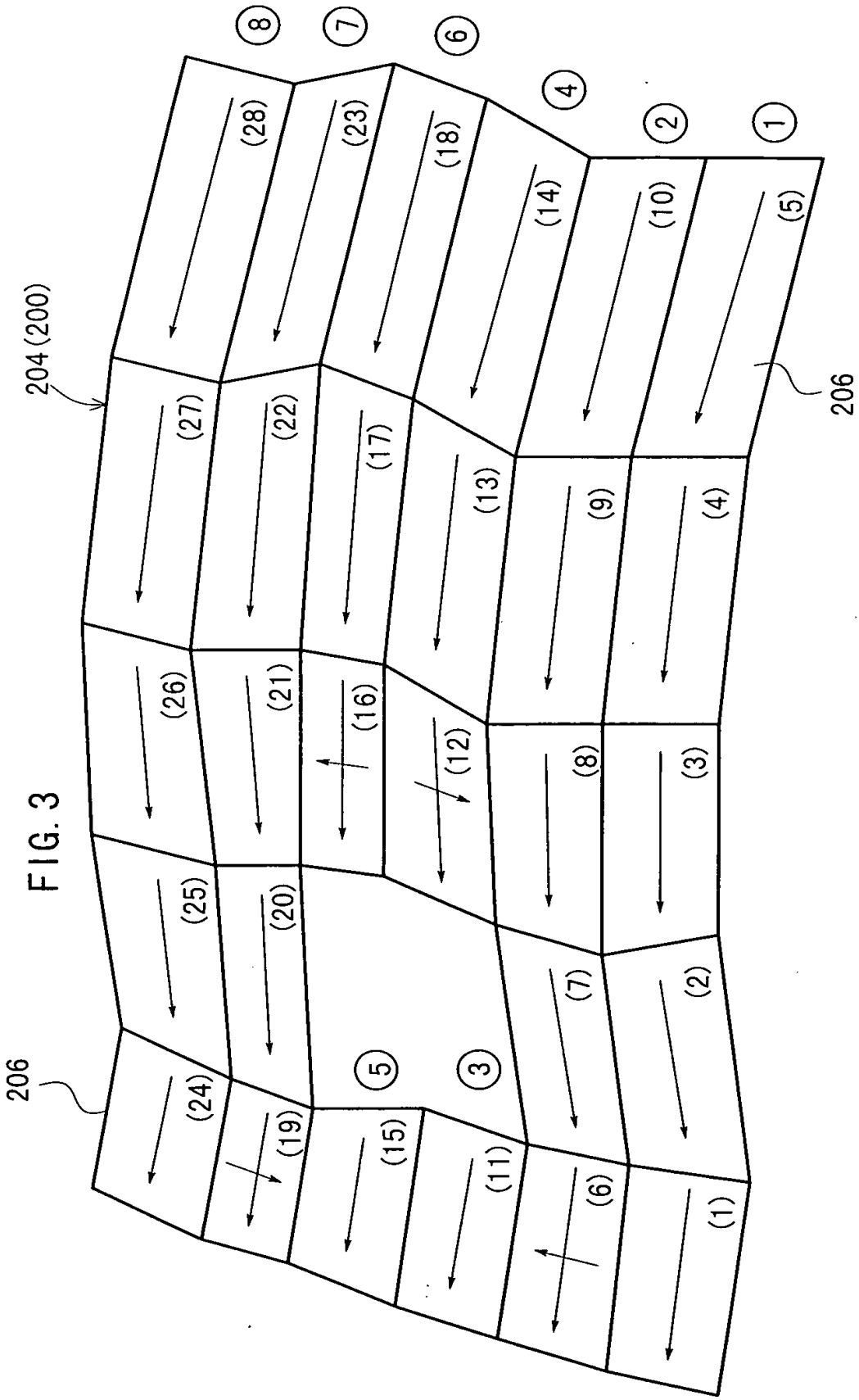

204 (200)
206
206
(1)
(2)
(3)
(4)
(5)
(6)
(7)
(8)
(9)
(10)
(11)
(12)
(13)
(14)
(15)
(16)
(17)
(18)
(19)
(20)
(21)
(22)
(23)
(24)
(25)
(26)
(27)
(28)

FIG. 4A

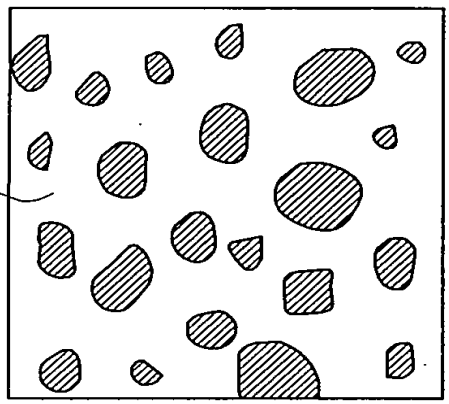


FIG. 4B

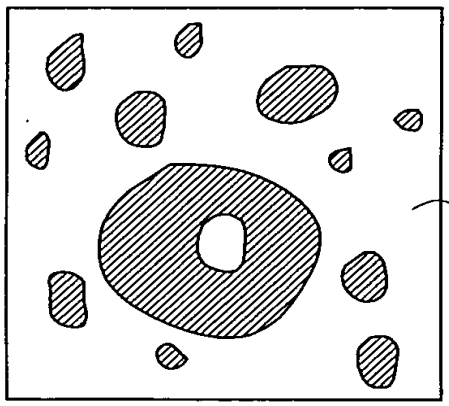


FIG. 5

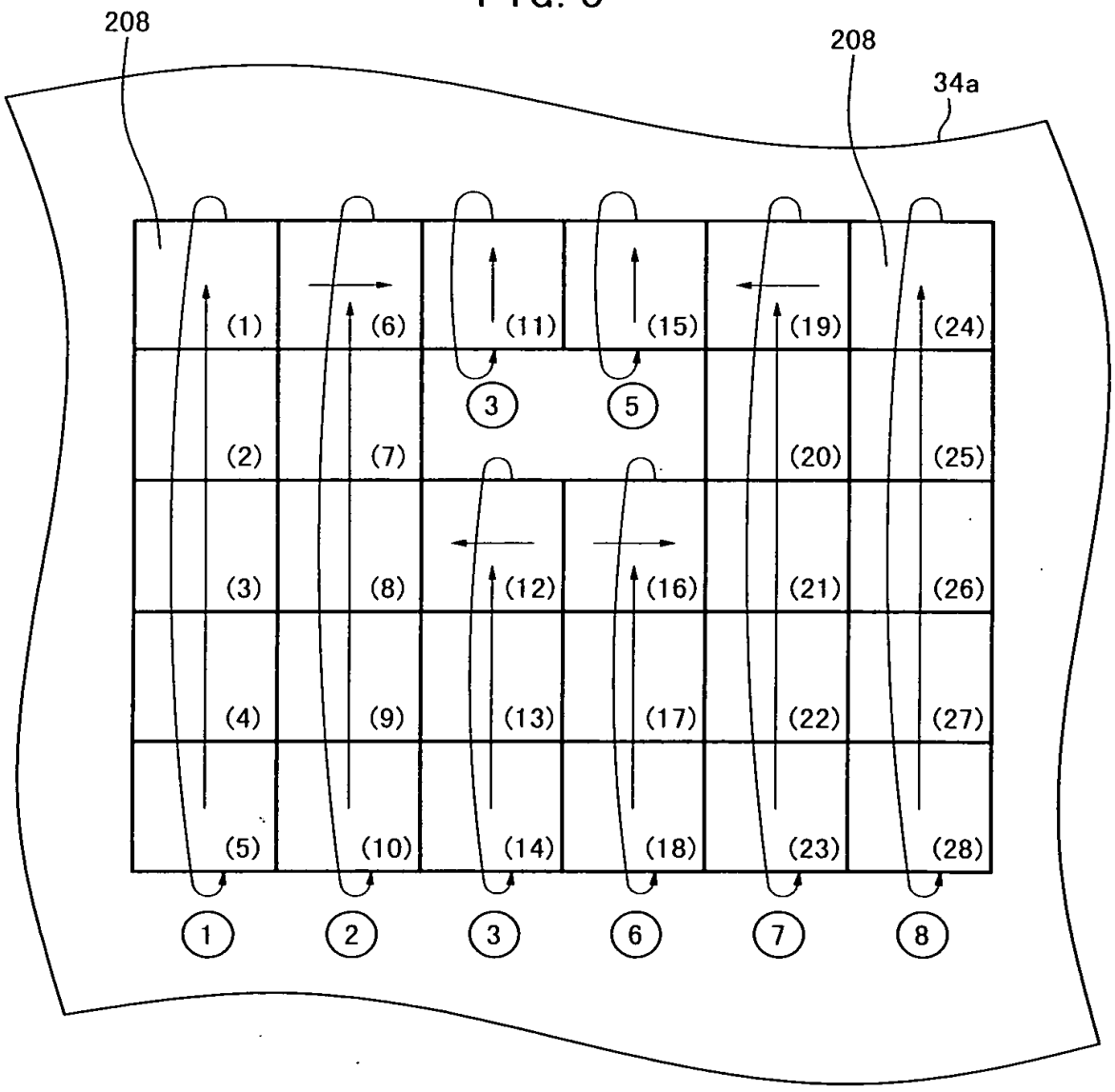

208
208
34a
(1)
(6)
(11)
(15)
(19)
(24)
3
5
(2)
(7)
(20)
(25)
(3)
(8)
(12)
(16)
(21)
(26)
(4)
(9)
(13)
(17)
(22)
(27)
(5)
(10)
(14)
(18)
(23)
(28)
1
2
3
6
7
8

FIG. 6

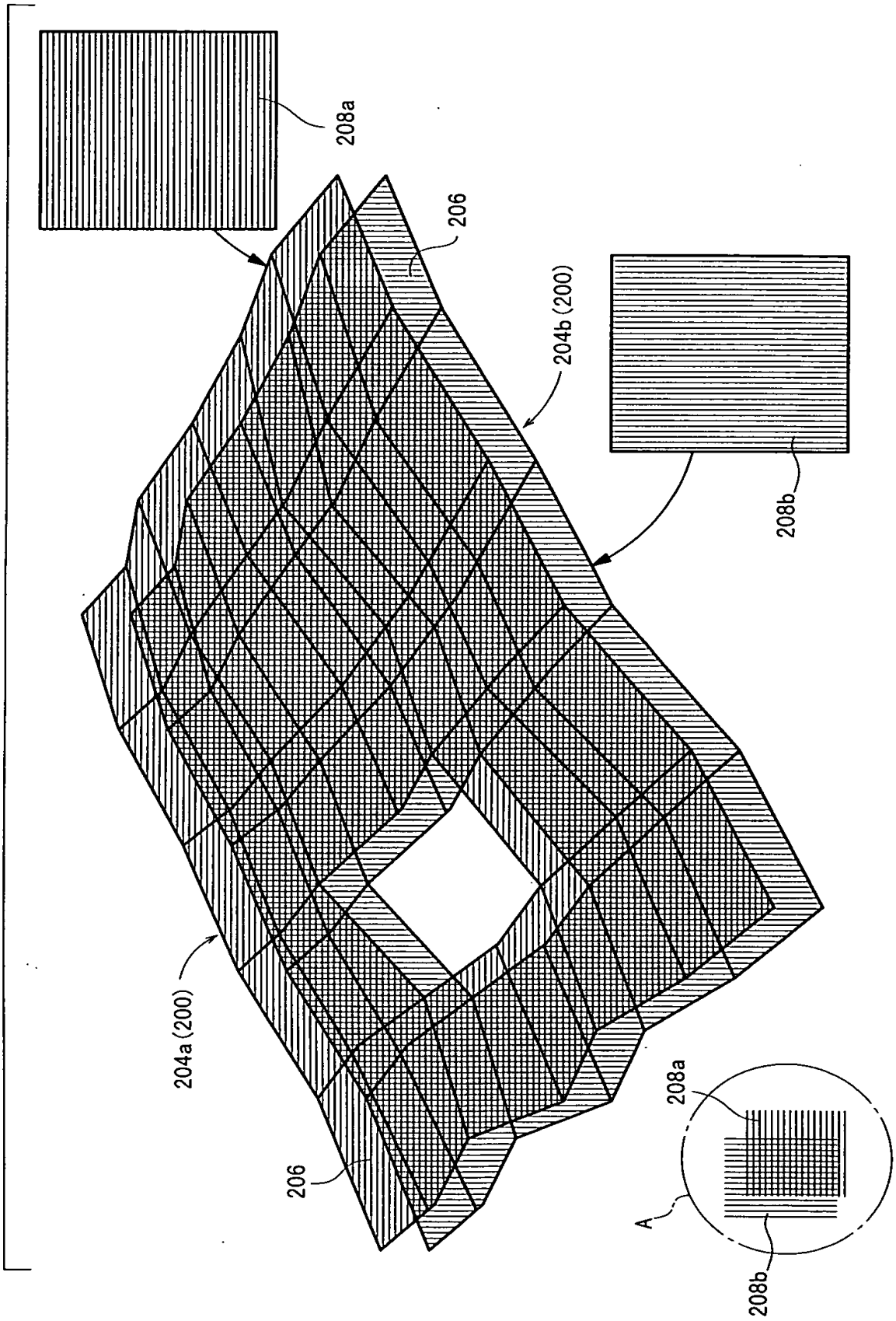


FIG. 7B

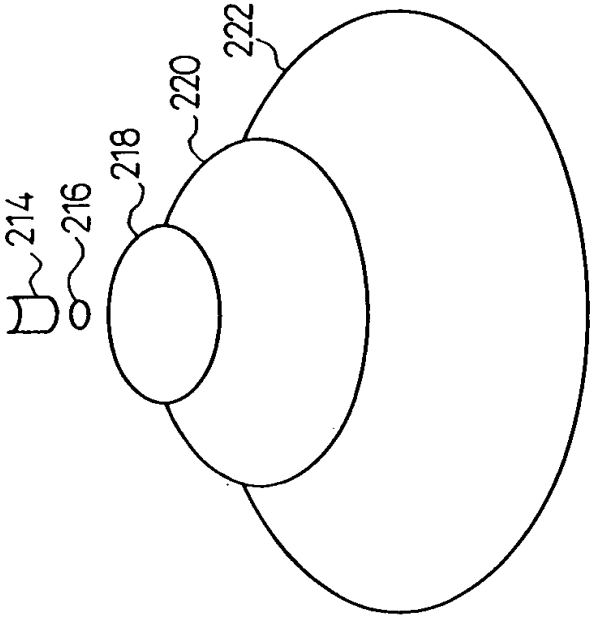


FIG. 7A

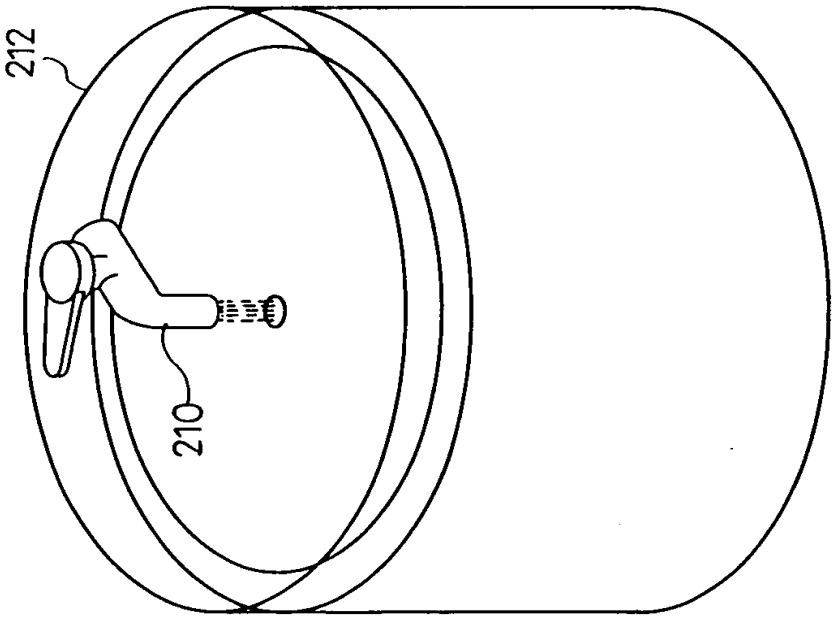


FIG. 8

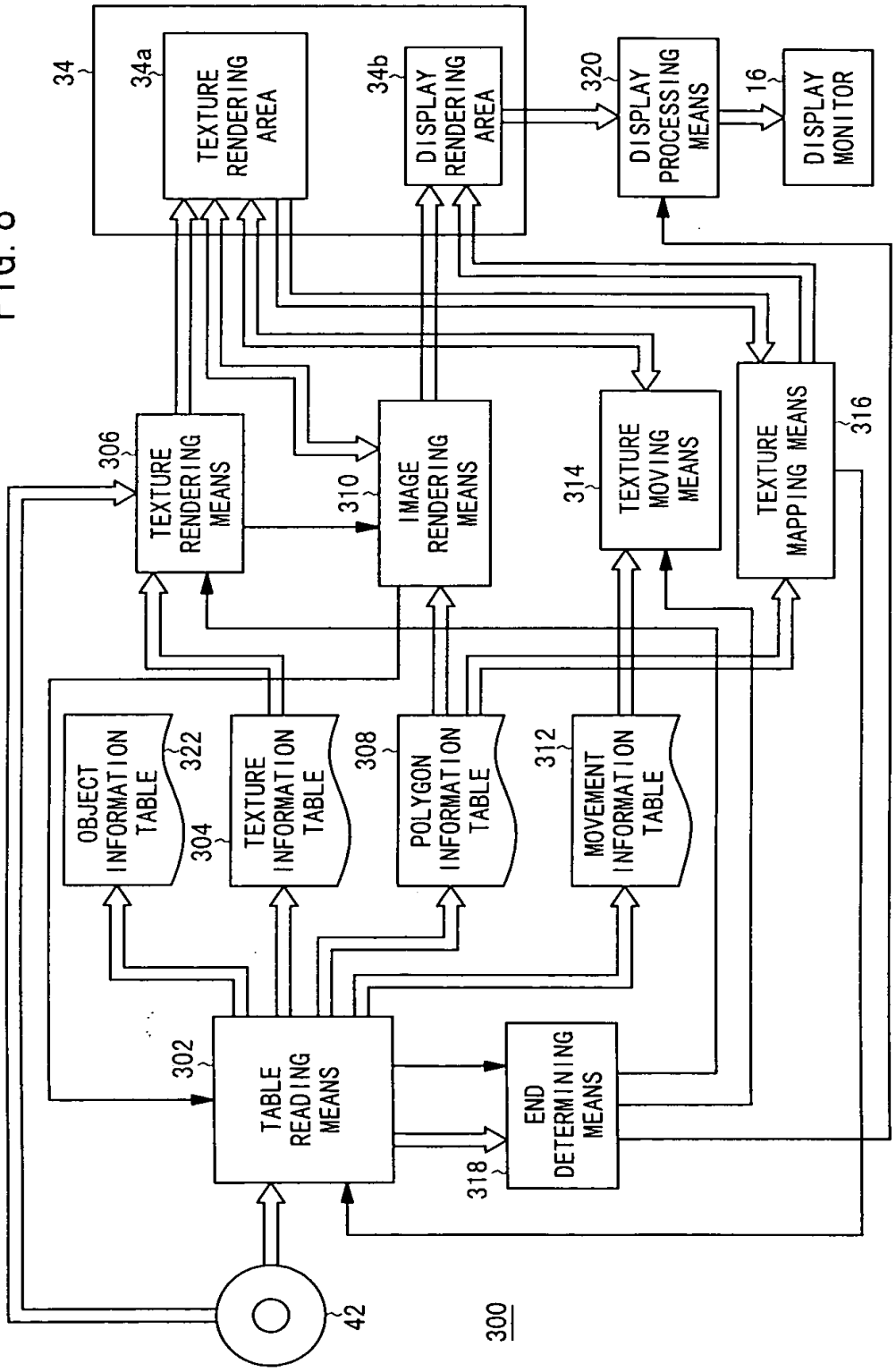

34
34a
TEXTURE RENDERING AREA
34b
DISPLAY RENDERING AREA
320
DISPLAY PROCESSING MEANS
16
DISPLAY MONITOR
306
TEXTURE RENDERING MEANS
310
IMAGE RENDERING MEANS
314
TEXTURE MOVING MEANS
TEXTURE MAPPING MEANS
316
OBJECT INFORMATION TABLE
322
304
TEXTURE INFORMATION TABLE
308
POLYGON INFORMATION TABLE
312
MOVEMENT INFORMATION TABLE
302
TABLE READING MEANS
END DETERMINING MEANS
318
42
300

FIG. 9

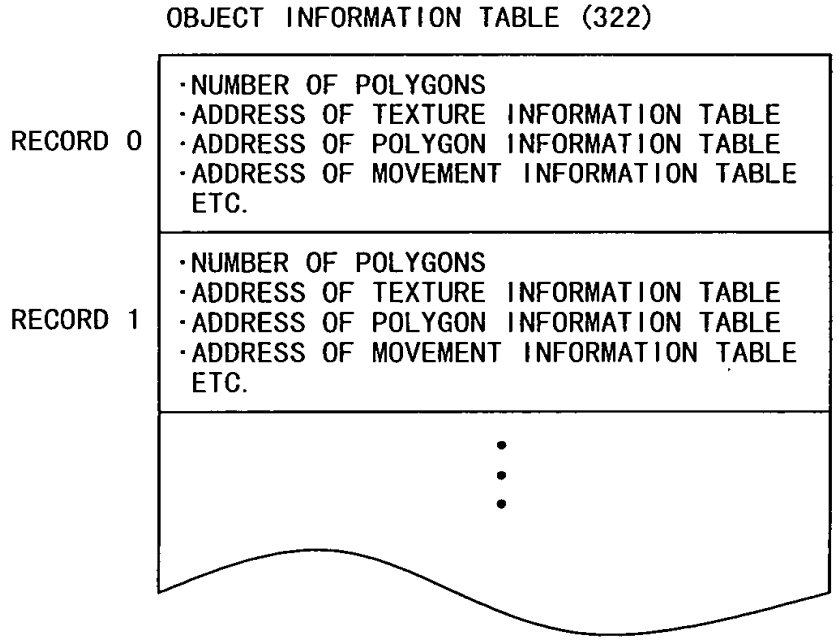

OBJECT INFORMATION TABLE (322)
RECORD 0
·NUMBER OF POLYGONS
·ADDRESS OF TEXTURE INFORMATION TABLE
·ADDRESS OF POLYGON INFORMATION TABLE
·ADDRESS OF MOVEMENT INFORMATION TABLE
ETC.
RECORD 1
·NUMBER OF POLYGONS
·ADDRESS OF TEXTURE INFORMATION TABLE
·ADDRESS OF POLYGON INFORMATION TABLE
·ADDRESS OF MOVEMENT INFORMATION TABLE
ETC.

FIG. 10

TEXTURE INFORMATION TABLE (304)

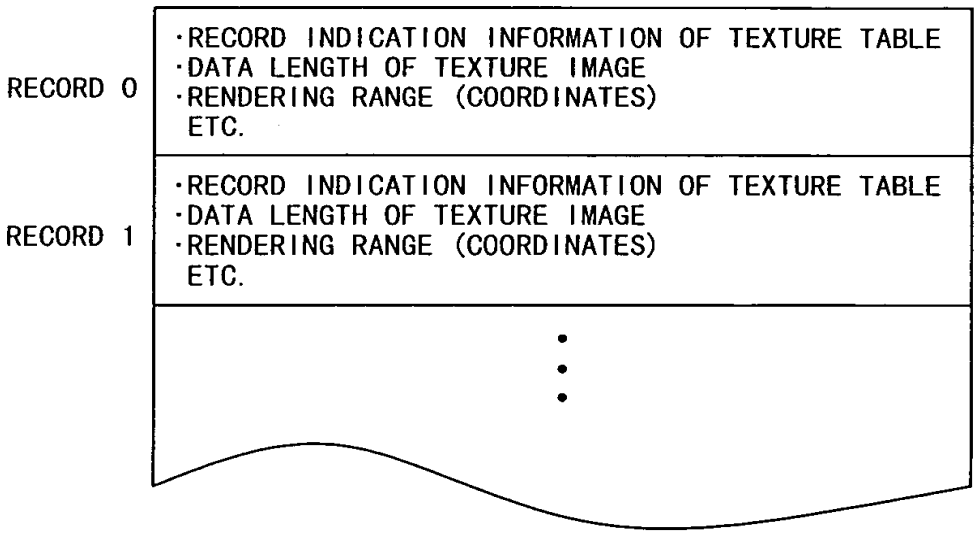


FIG. 11

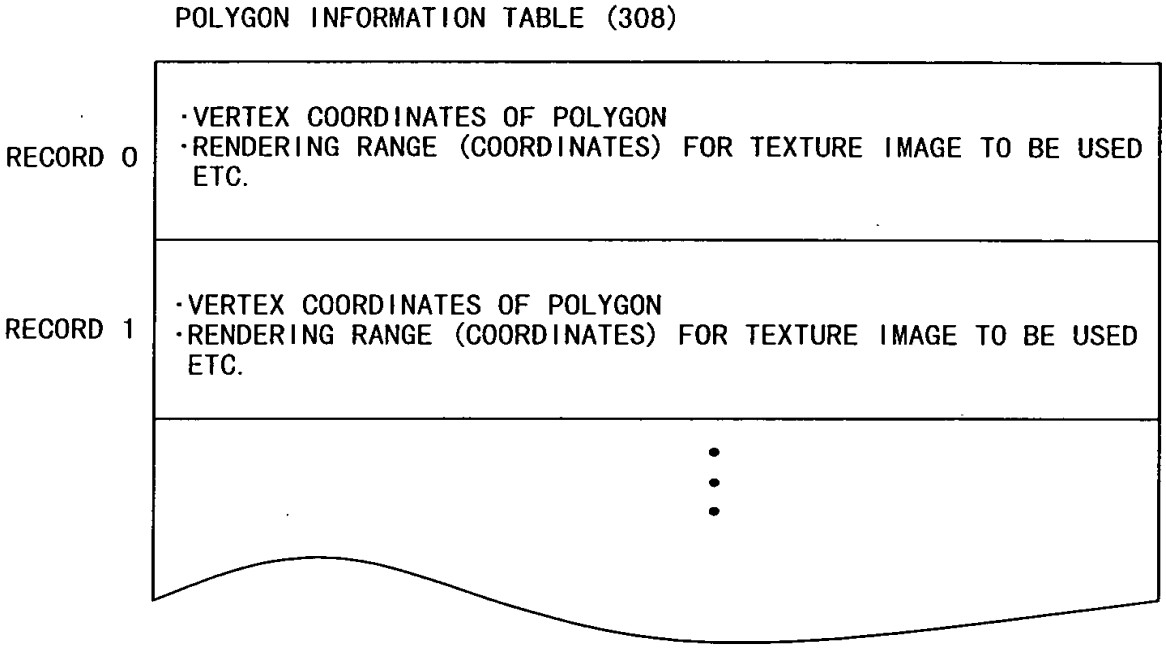

POLYGON INFORMATION TABLE (308)
RECORD 0
·VERTEX COORDINATES OF POLYGON
·RENDERING RANGE (COORDINATES) FOR TEXTURE IMAGE TO BE USED
ETC.
RECORD 1
·VERTEX COORDINATES OF POLYGON
·RENDERING RANGE (COORDINATES) FOR TEXTURE IMAGE TO BE USED
ETC.

FIG. 12

MOVEMENT INFORMATION TABLE (312)

RECORD 0	·RENDERING RANGE (COORDINATES) FOR TEXTURE IMAGE TO BE MOVED ·MOVEMENT DIRECTION ·CIRCULATION INFORMATION ETC.
RECORD 1	·RENDERING RANGE (COORDINATES) FOR TEXTURE IMAGE TO BE MOVED ·MOVEMENT DIRECTION ·CIRCULATION INFORMATION ETC.
	• • •

FIG. 13

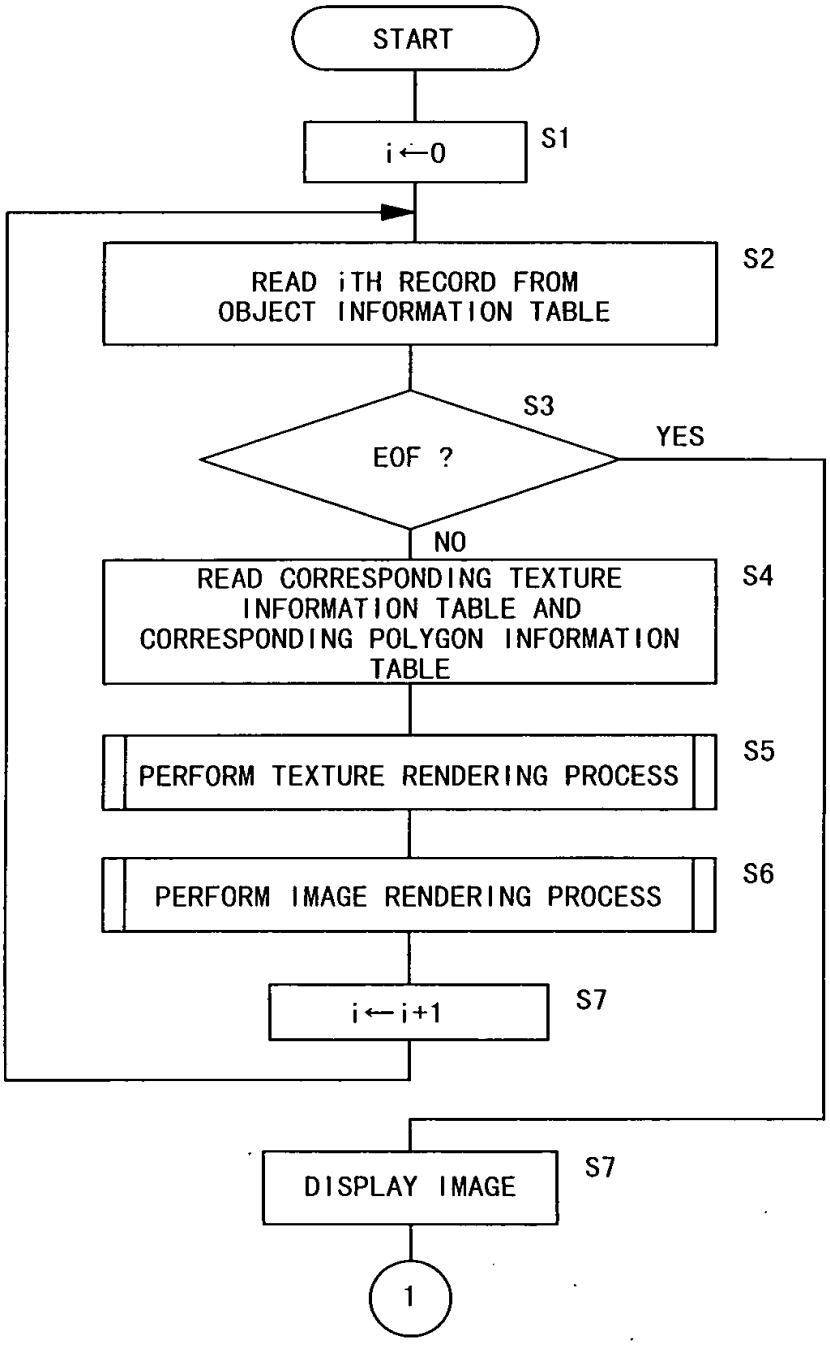

START
i←0
S1
READ iTH RECORD FROM OBJECT INFORMATION TABLE
S2
EOF ?
S3
YES
NO
READ CORRESPONDING TEXTURE INFORMATION TABLE AND CORRESPONDING POLYGON INFORMATION TABLE
S4
PERFORM TEXTURE RENDERING PROCESS
S5
PERFORM IMAGE RENDERING PROCESS
S6
i←i+1
S7
DISPLAY IMAGE
S7
1

FIG. 14

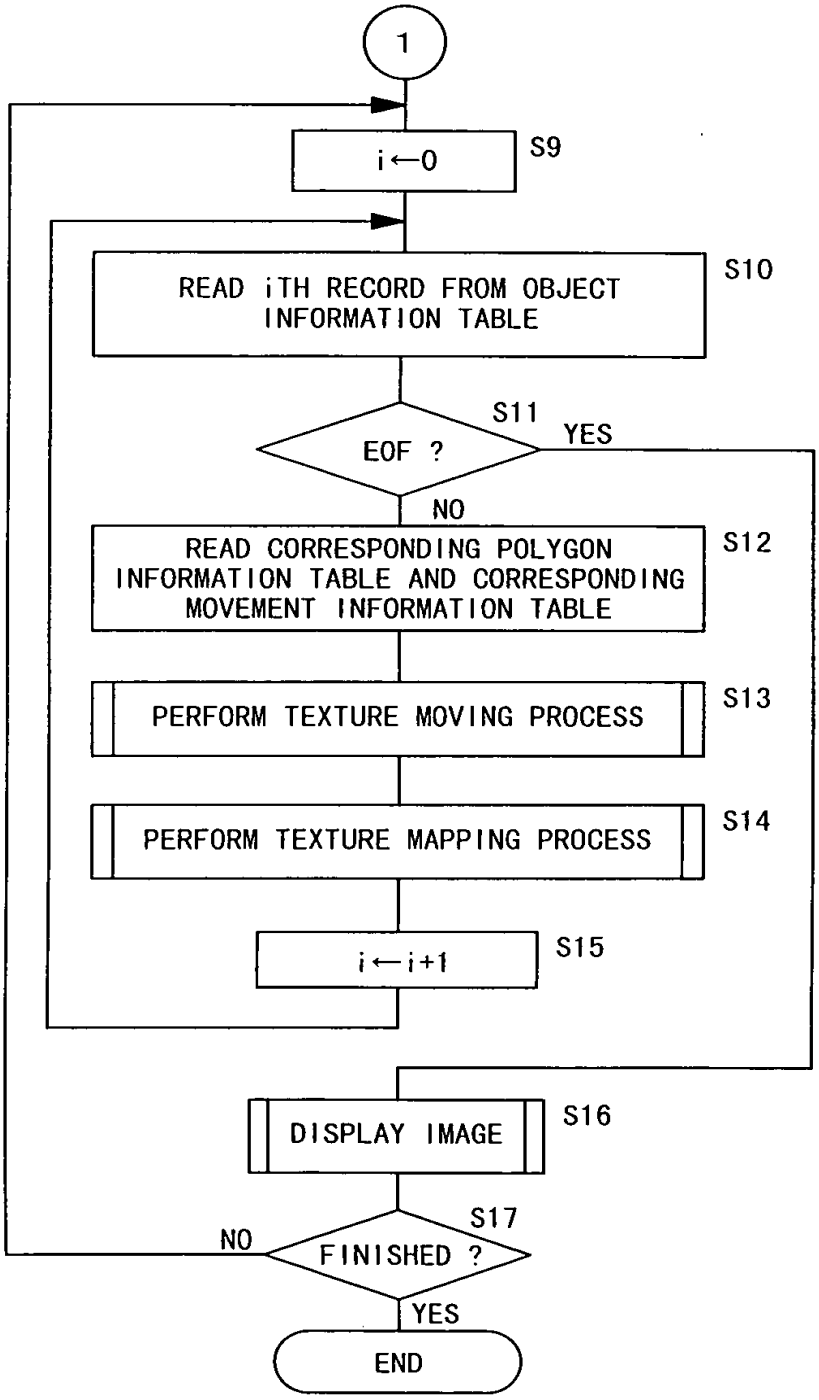

1
i←0
S9
READ iTH RECORD FROM OBJECT INFORMATION TABLE
S10
EOF ?
S11
YES
NO
READ CORRESPONDING POLYGON INFORMATION TABLE AND CORRESPONDING MOVEMENT INFORMATION TABLE
S12
PERFORM TEXTURE MOVING PROCESS
S13
PERFORM TEXTURE MAPPING PROCESS
S14
i←i+1
S15
DISPLAY IMAGE
S16
FINISHED ?
S17
NO
YES
END

FIG. 15

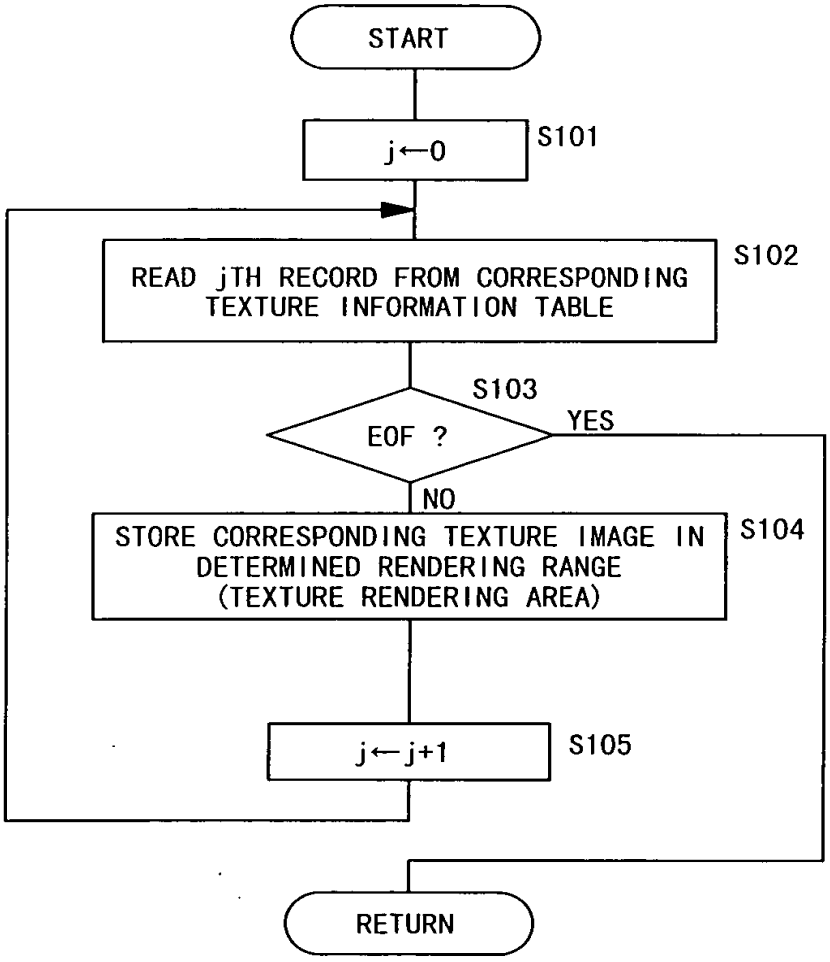

START
j←0
S101
READ jTH RECORD FROM CORRESPONDING TEXTURE INFORMATION TABLE
S102
S103
EOF ?
YES
NO
STORE CORRESPONDING TEXTURE IMAGE IN DETERMINED RENDERING RANGE (TEXTURE RENDERING AREA)
S104
j←j+1
S105
RETURN

FIG. 16

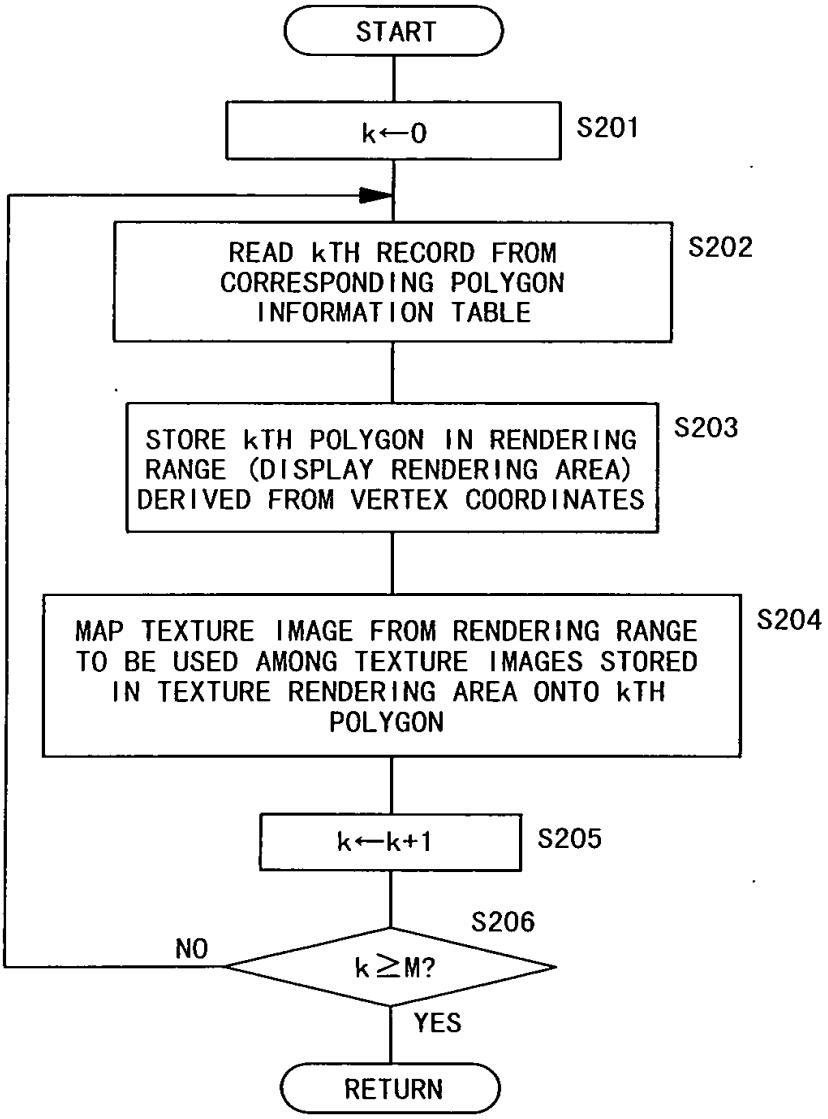

START
k←0
S201
READ kTH RECORD FROM CORRESPONDING POLYGON INFORMATION TABLE
S202
STORE kTH POLYGON IN RENDERING RANGE (DISPLAY RENDERING AREA) DERIVED FROM VERTEX COORDINATES
S203
MAP TEXTURE IMAGE FROM RENDERING RANGE TO BE USED AMONG TEXTURE IMAGES STORED IN TEXTURE RENDERING AREA ONTO kTH POLYGON
S204
k←k+1
S205
S206
NO
k≥M?
YES
RETURN

FIG. 17

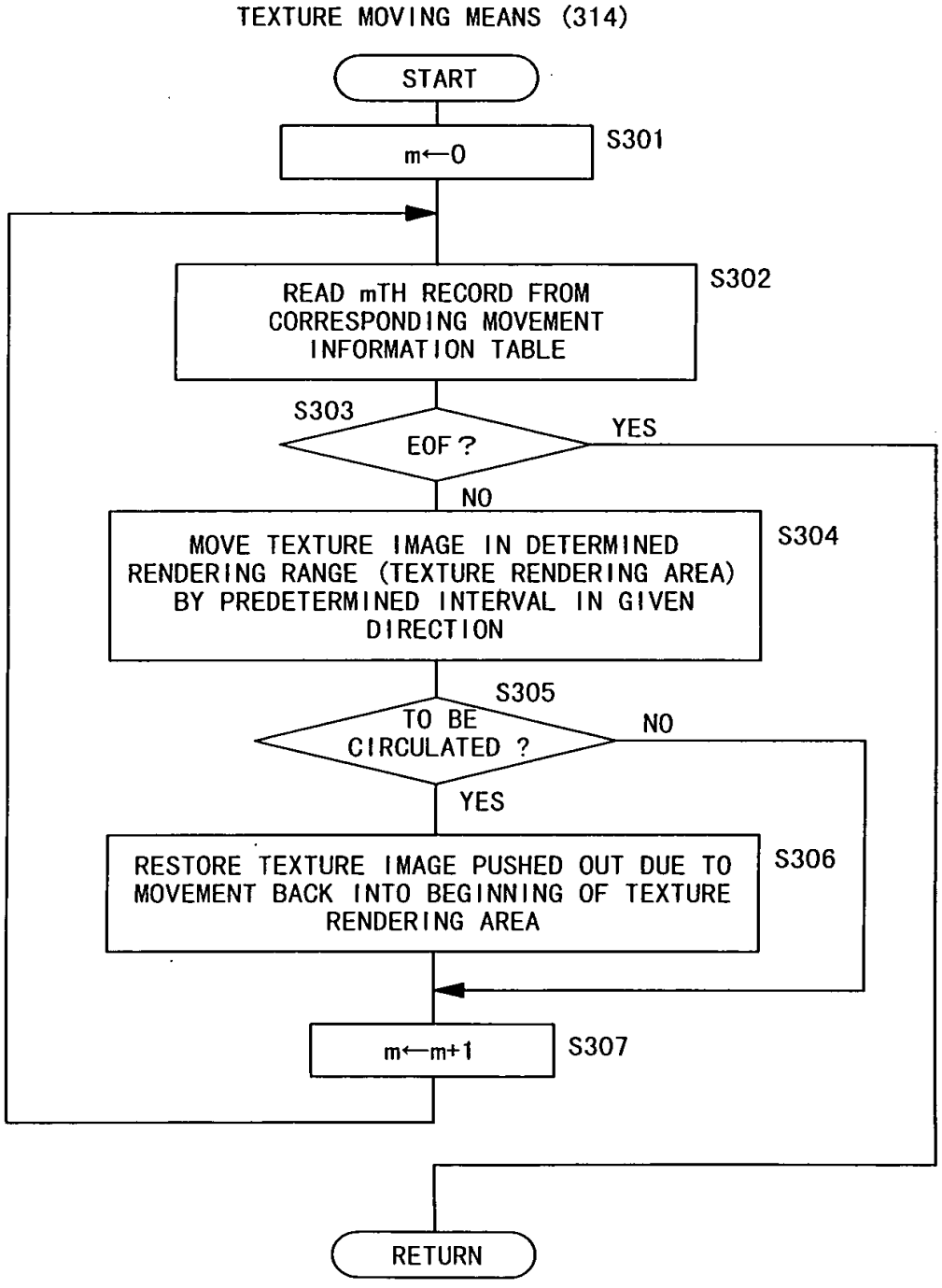
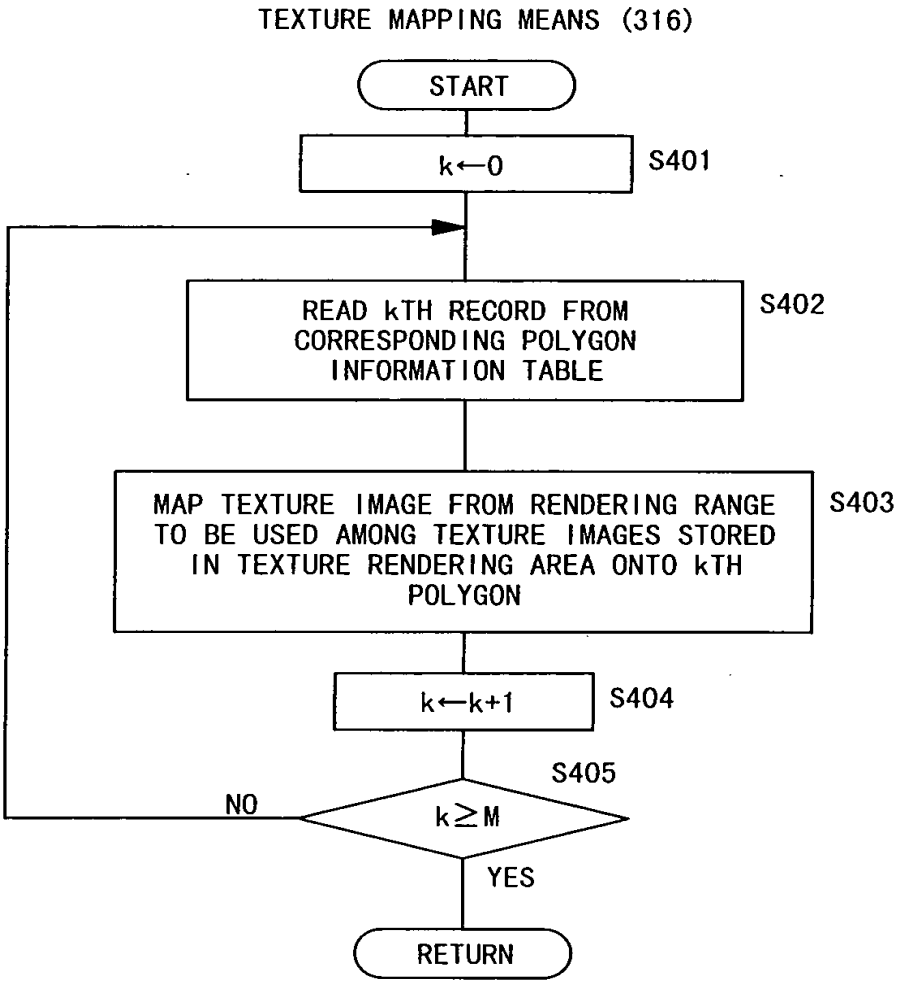

TEXTURE MOVING MEANS (314)
START
m←0
S301
READ mTH RECORD FROM CORRESPONDING MOVEMENT INFORMATION TABLE
S302
S303
EOF ?
YES
NO
MOVE TEXTURE IMAGE IN DETERMINED RENDERING RANGE (TEXTURE RENDERING AREA) BY PREDETERMINED INTERVAL IN GIVEN DIRECTION
S304
S305
TO BE CIRCULATED ?
NO
YES
RESTORE TEXTURE IMAGE PUSHED OUT DUE TO MOVEMENT BACK INTO BEGINNING OF TEXTURE RENDERING AREA
S306
m←m+1
S307
RETURN

FIG. 18


TEXTURE MAPPING MEANS (316)
START
k←0
S401
READ kTH RECORD FROM CORRESPONDING POLYGON INFORMATION TABLE
S402
MAP TEXTURE IMAGE FROM RENDERING RANGE TO BE USED AMONG TEXTURE IMAGES STORED IN TEXTURE RENDERING AREA ONTO kTH POLYGON
S403
k←k+1
S404
S405
NO
k≥M
YES
RETURN